NOvA Experiment Status

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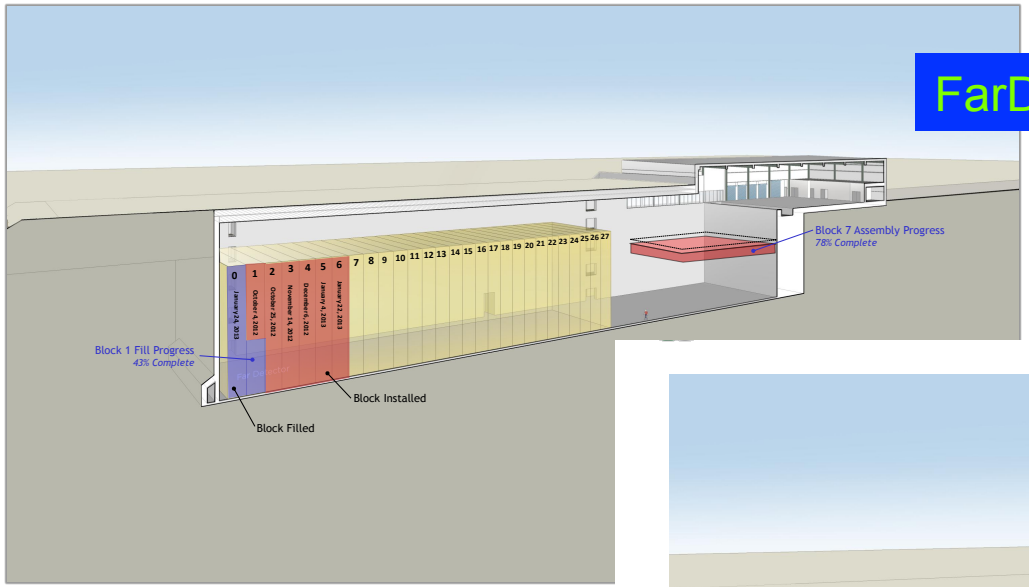
All Experimenter's Meeting February 10, 2014

Detector Assembly Progress

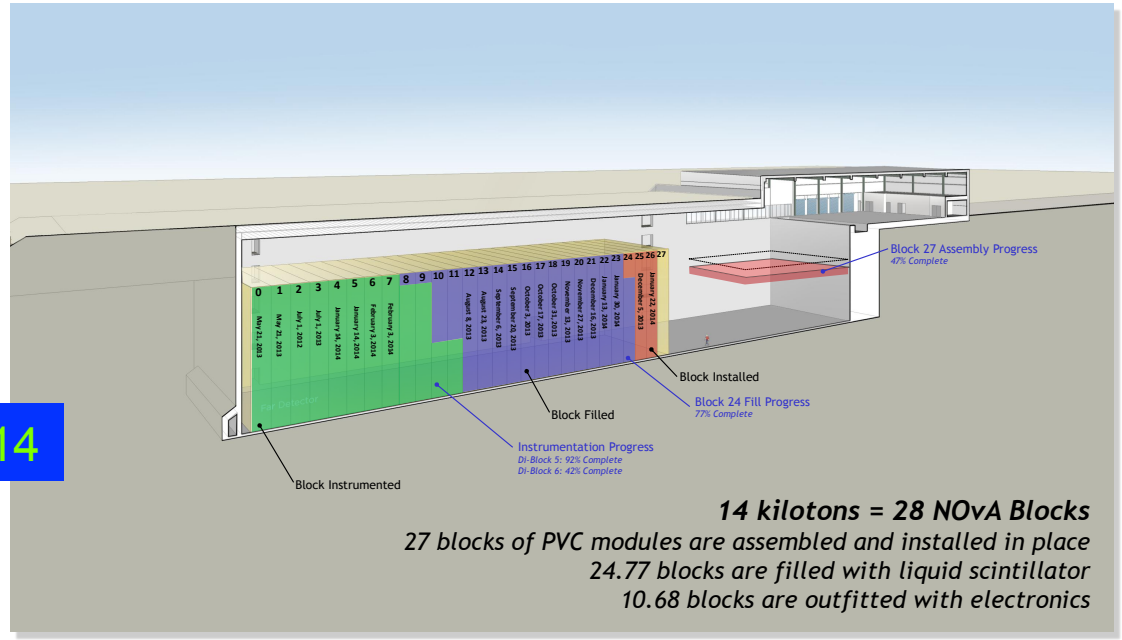
The Intensity Frontier

NOvA Far Detector Assembly Progress



FarDet, Feb 11, 2013

Status Date: 10FEB14



FarDet, Feb 3, 2014

14 kilotons = 28 NOvA Blocks

27 blocks of PVC modules are assembled and installed in place

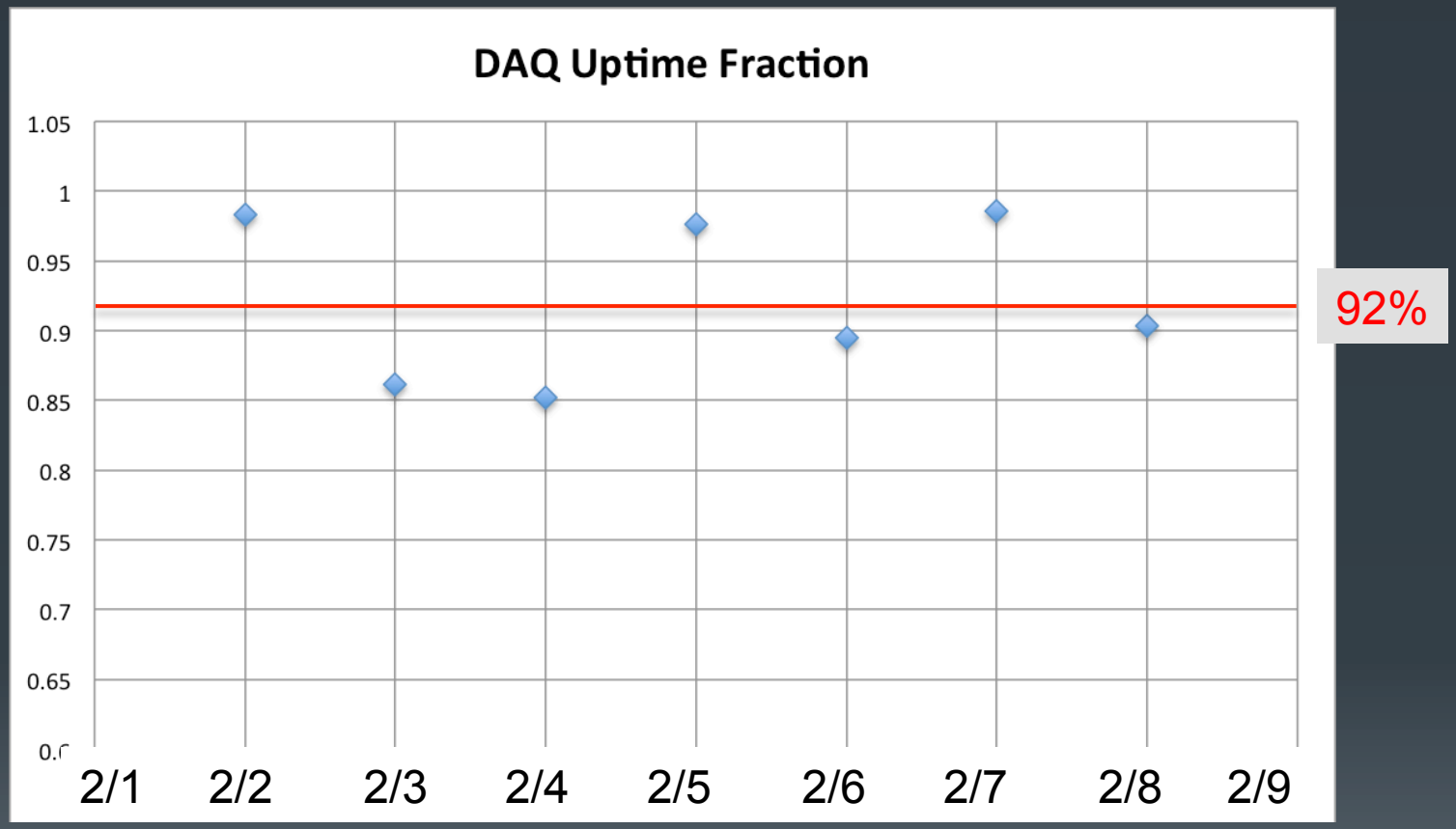
24.77 blocks are filled with liquid scintillator

10.68 blocks are outfitted with electronics

Far Detector Data-Taking

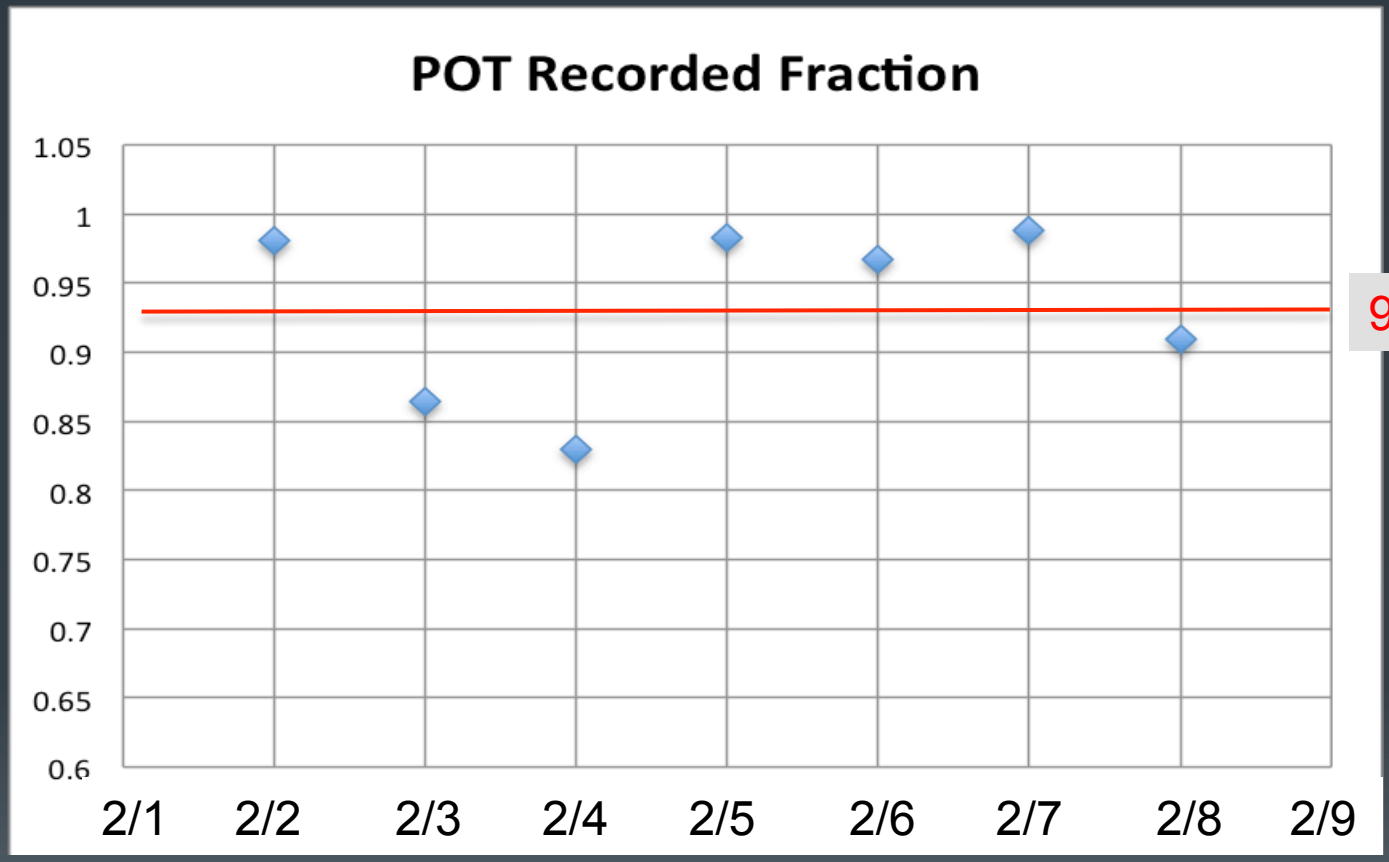
- Improvement in some DAQ processes increased uptime
- Moved to 3-Partition running (3 separate parts of the detector each running its own DAQ processes)
  - Partition 1
    - First 2 kilotons of detector
    - APDs running full gain, cold
    - Stable part of detector
  - Partition 2
    - Second ~3.5 kilotons of detector
    - APDs running full gain, mixed cold/warm
    - Commissioning section of FarDet
  - Partition 3
    - Next 5 kilotons of detector
    - Filled with scintillator, Front-End electronics only (no APDs)
- Neutrino search on Partition 1 with little downtime

DAQ Uptime



- Plot for last week
- Average of ~92% for past week
- Stable running on Partition 1 (stable part of detector)

Fraction of POTs Recorded



- Averaging little over 93% for past week
- Stable running of stable partition
- Recorded ~5.9E18 POTs out of 6.9E18 delivered (86%)

Summary

- Cooled APDs looking good – especially those without A174 primer coating
- DAQ improvements increased our uptime
- In past week, switched to 3-partition running (3 separate parts of the FarDet running partitioned DAQ)
  - Optimize our beam exposure for stable part of the detector
  - Optimize detector checkout for new installations
  - Improvement in POTs recorded